

## WEB-BASED ENTERPRISE MANAGEMENT WITH MULTIPLE REPOSITORY CAPABILITY

### ABSTRACT OF THE DISCLOSURE

A transport neutral technique allows an object manager to communicate with a  
5 CIM repository using any of a variety of protocols. The object manager software is  
independent of the transport mechanism used and need not be changed if the transport  
mechanism changes. A computer system to be managed includes a CIM object manager  
and any number of provider APIs that provide resource information about the computer  
system. A CIM repository stores classes and instances used by the object manager. A  
10 remote application computer runs a software management application that communicates  
with the object manager of the computer system using a local client API. A Repository  
API of the object manager includes an interface definition defining all methods called by  
the object manager. Also included is a protocol-specific class that implements the  
interface definition; there is a protocol-specific class for each protocol desired to be  
15 supported. Each class implements methods using a specific protocol. A factory class is  
executed when the object manager invokes a method call passing in a desired protocol  
parameter. The factory class creates a protocol-specific object of one of the protocol-  
specific classes depending on the protocol parameter. The object is returned to the object  
manager which executes one of its protocol-specific methods thus allowing  
20 communication to a repository using a protocol independent of the object manager.